

January 15, 2013

Attn: Compliance Tracker, AE-17J
Air Enforcement and Compliance Assurance Branch
U.S. Environmental Protection Agency Region 5
77 West Jackson Boulevard
Chicago, Illinois 60604

RE: Consent Decree Civil Action No. 1:09-CV-545
Effective Date February 4, 2010

Dear Sirs:

Please find attached the Leak Detection and Repair Compliance Status Report for Second Half 2012.
Please contact me at (513) 467-2470 or michele.smith@ineos.com if you have any questions concerning the submitted information.

Respectfully Submitted,



Michele A. Smith, P.E.
Lead Environmental Engineer
INEOS ABS (USA) Corporation

cc: M. Palmero, USEPA Region 5
T. Kalman, OEPA
G. Bachmann, Ohio AG
M. Kramer, SWOAQA

INEOS ABS (USA) CORPORATION'S ADDYSTON, OH PLANT

CONSENT DECREE COMPLIANCE STATUS REPORT

Consent Decree Civil Action No. 1:09-CV-545

Effective Date February 4, 2010

Reporting Period: 07/01/12 – 12/31/12

I. INTRODUCTION

The following report contains the required information about INEOS ABS' compliance activities associated with the requirements in Paragraph 35.a. through 35.h. in Appendix A of the Consent Decree.

II. COMPLIANCE REQUIREMENTS

Per Appendix A (Enhanced Leak Detection and Repair Program) of the Consent Decree, INEOS ABS met the following compliance requirements:

A. PERSONNEL REQUIREMENTS

1. Plant Personnel – The facility employs one full-time Leak Detection and Repair (LDAR) Monitoring Technician to perform all monitoring at the facility. In addition, we have an additional three technicians that are trained and can perform monitoring if the main technician is unavailable. The LDAR Administrator is not a full time position, but the engineer assigned to this position spends approximately one-third of their time on administrating the program. The Maintenance Department has assigned a full-time mechanic to perform LDAR leak repairs as their main priority over all other jobs; this ensures that the repairs are completed in the required timeframe. Recent past performance has shown that the number of employees assigned to the LDAR program is sufficient. Administrative controls have been implemented so that sufficient resources will be utilized if needed to ensure compliance with this program.
2. Contractors - Contractors are used to assist in monitoring connectors at the facility and may be used to level peak work load. Contractors were used in the second half of the year to monitor connectors.

B. NON-COMPLIANCE WITH APPENXIX A

Per Paragraph 50 b. of the Consent Decree, INEOS ABS submitted the following letters of noncompliance to the U.S. EPA and Ohio EPA:

1. LDAR Missed Monitoring – Letter Dated August 1, 2012

Eighteen pumps and seven agitators in our P047 Process Unit were not monitored in July 2012. The process unit ran the first six days of the month and shut down for maintenance reasons. No LDAR monitoring was performed these days as the LDAR Technician and Administrator were on vacation. The Process Unit was to resume operations at the end of the month. During the shutdown, it was determined that the unit would not restart in July for inventory control reasons. As the pumps and agitators were not monitored within the first six days of the month, they were not monitored in July. In addition, one agitator (#04958) in our Process Unit P004 was not monitored in July 2012. Process Unit P004 did not operate in July 2012. However, even if a process unit is down, some of the components may still be in service as they may be used by another process unit. In July, Process Unit P015 was operating and

agitator #04958 was used, but not monitored. This agitator was overlooked. Training has been completed to prevent this from occurring again.

2. LDAR Missed Retest Monitoring – Letter Dated September 24, 2012

One open-ended line (#10534) was discovered leaking on September 17th and repaired on September 19th. The component was not monitored until September 21st. This monitoring was completed within the five-day repair period, but was not completed the first business day after the repair as required in Appendix A of the Consent Decree.

3. LDAR Internal Audit – Fourth Quarter 2012

The LDAR program at this facility contains close to 16,000 components. We have had three third-party audits performed (Conestoga-Rovers in 2010, Environmental Quality Management in 2011, and TRC Environmental in 2012) that confirmed the LDAR inventory and resulted in the discovery of only one missed component.

Nevertheless, as we have previously disclosed, internal inspections after those audits were conducted uncovered additional components that have not been included in the LDAR inventory. Frustrated by these discoveries, we completed a comprehensive internal audit of the entire facility. This audit resulted in the discovery of several components that were not included in the LDAR Inventory, several components that did not meet the requirement to be in the LDAR program, and several components that were in the LDAR inventory twice (i.e., an open-ended line also in the inventory as a connector). This audit started in third quarter 2012 and was completed in fourth quarter 2012. The audit resulted in the discovery of the following components that were not included in the LDAR inventory and the removal of the following components from the LDAR inventory:

Process Unit	No. of Valves		No. of OELs		No. of Connectors	
	Added	Deleted	Added	Deleted	Added	Deleted
P001	15	21	4	2	173	284
P004	12	0	11	0	239	85
P015	18	0	23	0	272	145
P021	1	1	1	0	82	55
P042	28	33	36	4	776	384
P047	14	2	12	0	522	251
P048	1	0	3	0	85	26

4. LDAR Missed Monitoring – Letter Dated January 8, 2013

In process unit P004, 711 connectors were not monitored in calendar year 2012. The process unit shut down unexpectedly due to an equipment malfunction in October. The equipment could not be repaired by the end of the year. Connectors were scheduled to be monitored in this process unit in November. The connectors will be monitored within one week of the process unit startup, which is tentatively planned for late January 2013.

In process unit P015, 26 connectors and three difficult-to-monitor valves were not monitored in calendar year 2012. In 2012, this area was in operation for less than one week in May. During that time, all valves, open-ended line, and pumps were monitored. In May 2012, it was not known that this product would not be scheduled for the remainder of the year. Current plans have this area of the

process unit used next in December 2013. At that time, all connectors, valves, open-ended lines, and pumps will be monitored.

C. PROBLEMS ENCOUNTERED

No problems were encountered in complying with the requirements of Appendix A.

D. EQUIPMENT REPLACEMENT/IMPROVEMENT PROGRAM (ERIP)

Attachment #1 includes additional information on the ERIP, including each piece of equipment replaced or improved and the schedule for future replacements or upgrades. The information provided is for the second half of 2012.

E. COMMERCIAL UNAVAILABILITY OF CERTIFIED LOW-LEAKING VALVES/ PACKING TECHNOLOGY

Only certified low-leaking valves and certified low-leaking packing technology has been used during repairs/replacements of valves and/or packing materials.

F. LDAR TRAINING

Annual training was completed for all employees at the facility in November 2011. Refresher training was completed in the second half of 2012. All contractors who performed LDAR activities are trained on LDAR requirements at the facility and are provided with a copy of Appendix A.

G. QUALITY ASSURANCE/QUALITY CONTROL (QA/QC) AUDITS

QA/QC audits were performed each quarter in 2012 and the following corrective actions were identified and addressed:

1. Third Quarter 2012

Several components not included in the LDAR program. Components have been added to inventory. Completed – Information sent to the EPA in Third and Fourth Quarter Consent Decree Reports.

2. Fourth Quarter 2012

Locate previous year's LDAR weekly inspections and file in an appropriate place for five years. Train Technicians on the location of stored records and department record handling procedures. Due to be completed by 02/28/13.

H. LDAR EXTERNAL AUDIT

The LDAR External Audit was completed on September 13, 2012 for Covered Process units P001, P021 and P042. Below is a summary of the results from the audit:

1. Comparative Monitoring Audit

The comparative monitoring leak ratios were below 3.0 for all components for all process units monitored. Therefore, no corrective actions were needed.

2. QA/QC Audit

The audit revealed no issues with monitoring at the assigned frequencies, Delay of Repair documentation, calibration procedures, or monitoring being performed in accordance with U.S. EPA Method 21. However, the following deficiencies were noted during the audit:

- The 2011 audit report calculated the 'LDAR Historic Average Leak Percentage' over 13 periods for pumps and agitators instead of the required 12 periods resulting in a comparison to the incorrect leaking percentage.
- The 2011 audit report Corrective Action Plan (CAP) was submitted to the EPA 124 days after the audit was completed. The consent decree requires 120 days.

- INEOS performed the Quasi-Directed Maintenance during all repair attempts with the exception of the following leaks which were sampled greater than one business day after the leak repair: 10890 (09/14/11), #01424 (09/14/11), #02096 (08/18/11), #07873 (12/2/11), #10212 (03/29/12), #10402 (03/21/12), and #10190 (03/06/12). All instances were reported to the EPA.
- Valve tag #03312 in process DIN1 was found leaking on 03/07/2012, but was not replaced until 05/01/2012 which exceeded the 30 day repair period. This was reported to EPA in the First Half 2012 Compliance Status Report.
- The weekly pump/agitator visual inspection records were missing for the following weeks: 3/26/12 (P001); 11/16/11, 5/30/12, and 7/25/12 (P022); 10/31/11, 5/7/12, and 5/14/12 (P042).
- Several weekly pump/agitator visual inspection records in P042 indicated 'Yes' for a visual leak, but the comment field did not indicate oil or other non-VOC material was leaking. Additionally, these leaks were not listed on the leak summary reports where leak repairs are tracked and some inspections did not have the inspector's signature.
- The Compliance Status Reports submitted for the 2nd half of 2011 and 1st half of 2012 did not include a separate section describing the ERIP activities for the covered period.
- There was no documentation of the reason for not attempting drill-and-tap repair procedures for valves prior to placing them on the Delay of Repair (DOR) list.
- The weekly pump/agitator visual inspection record for P042 for the week of 2/19/12 did not indicate 'Yes/No' for leaks from any pump or agitator.
- At 1130 on 12-14-11 the Shaw Group 2 exceeded the allowed amount of instrument response time for five monitored readings in one minute when compared to pre-monitoring calibrations.

I. CORRECTIVE ACTION PLAN (CAP)

The CAP for the 2012 external audit was completed on 10/01/12 and was submitted to U.S. EPA for approval on 01/08/13. All corrective actions identified in the CAP have been completed.

II. CERTIFICATION

I certify under penalty of law that I have examined and am familiar with the information in the enclosed documents, including all attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for knowingly submitting false statements and information, including the possibility of fines or imprisonment pursuant to Section 113(c)(2) of the Act, and 18 U.S.C. §§ 1001 and 1341.

Respectfully Submitted,

Eric Cassisa
Plant Manager, NAFTA
INEOS ABS (USA) Corporation



ATTACHMENT # 1

Equipment Replacement/Improvement Program

Consent Decree Civil Action No. 1:09-CV-545

Effective Date February 4, 2010

Reporting Period: 07/01/12 – 12/31/12

INEOS ABS - Addyston Plant

LDAR ERIIP Outstanding Improvement

01/09/2013

Tag #	Process Unit	Component Description	Leak Detected	Replace/ Repack By Date
01051	EMUL	Valve-Manual vent on top of Bd sphere	08/23/12	At next passivation
6012	EMUL/ TK FM	Autoblock on top of sphere to compressor house	03/10/11	At next passivation
6025	EMUL/ TK Fm	Bd unloading charge line to sphere drain valve south of dike wall	03/17/12	At next passivation
07981	DIN1/ TK Fm	C1 Recirculation inlet valve	03/06/12	Next time tank is emptied
07984	DIN1/ Tk Fm	Valve-C1 Level indicator outlet valve	11/13/11	Next time C1 tank is emptied
10483	DIN1/ TK FM	AN transfer line drain valve inside tunnel-south side at ground	08/25/12	Next time C1 tank is emptied after 1st shutdown 4Q12
11221	DIN1/ TK Fm	C1 Auto Valve on inlet side of transfer pump	03/06/12	Next time C1 tank is emptied after 1st shutdown 4Q13
04441	EMUL	Valve-pressure gauge on water separator recirc line	11/29/12	At next passivation
08286	EMUL	Valve-Relief bypass valve at inlet side of filter	11/29/12	At next passivation
09037	EMUL	Water separator outlet valve to Bd storage tank	10/11/12	At next passivation
02374	DIN1	Valve-R2 Reflux receiver rec valve	12/19/12	At next maintenance shutdown
02376	DIN1	Valve-R2 reflux block valve from recvr to water bomb	12/19/12	At next maintenance shutdown
02746	DIN1	Manual valve outlet for R2 feed tank vent on R2 reactor dome platform	12/29/12	At next maintenance shutdown
09084	DIN2	Bottom reflux rcvr bomb-manusla valve to outlet to organic trap	10/25/12	At next maintenance shutdown
09936	SAN1	N2 purge to pre-mix tank manual valve for pressure gauge	11/01/12	At next maintenance shutdown

INEOS ABS - Addyston Plant
LDAR Leaker Replacements/Repackings -
Greater than 250 ppm Leak

01/09/2013

Tag #	Process Unit	Component Description	Leak Detected	Date Replaced	Date Repacked	Shutdown Req'd?	Replace/ Repack By Date
04385	EMUL	Valve-C kettle AN charge line	11/09/12	12/05/12		YES	12/09/12
07107	EMUL	Valve-Auto block vavle at E Mon II	06/22/12 08/25/12	07/03/12		NO	07/22/12 09/24/12
6039	EMUL	Valve-Water seperator pressure gauge on recirc line	03/09/12	07/25/12		YES	NA
00795	DIN1	Valve-A13 feed line from tank to pumps	02/28/12		07/18/12	YES	NA
01398	DIN1	Valve-AN totalizer outlet drain	08/29/12	09/21/12			09/28/12
02593	DIN1	Valve-Styrene line in north side of R1 feed tree	03/20/12	07/12/12		YES	NA
03004	DIN1	Valve-Styrene AutoXV into irganox mix tank	08/20/12	11/15/12		YES	
6182	DIN1	Valve-East AN filter manual drain	08/29/12	09/21/12			09/28/12
08549	DIN	Valve-Irganox XV valve for styrene at top of tank	08/23/12	11/14/12		YES	
09310	DIN1	Valve-AN High point vent at RR tracks	03/15/12	07/12/12		YES	NA
01981	DIN2	Valve-AMS in R1 Feed Tree to Reflux Recvr	10/25/12	11/17/12		NO	11/24/12
08431	DIN2	Valve-Vent spray manual valve	10/29/12	11/17/12		NO	11/28/12
08455	DIN2	Valve-Catalyst to R2 at melt line	10/20/12	10/20/12		NO	11/19/12
10143	DIN2	Valve-DIN2 rubr slurry tank recycle drain	10/20/12	11/15/12		NO	11/19/12
10169	DIN2	Valve-Rubber filters outlet valve west bank	06/06/12	07/25/12		NO	07/06/12
04186	DN1	Valve-Reflux receiver manual vent	10/04/12	12/07/12		YES	
07898	DN 1	Valve-outlet side of chiller before contactor	04/19/12	07/26/12		YES	NA
09111	DN1	Valve- MACT collection tank man vent	04/30/12	07/26/12		YES	NA
6220	SSET	Valve-BNS cat feed line	12/17/12	12/19/12		NO	01/16/13

INEOS ABS - Addyston Plant
LDAR Leaker Replacements/Repackings -
Between 100 ppm and 250 ppm Leak
October 1, 2011 - December 31, 2011

01/09/2013

Tag #	Process Unit	Component Description	Leak Detected	Conc. (ppm)	Date Replaced	Date Repacked
02096	DIN2	Valve-AN to process by contactor	10/13/11	197	07/12/12	

INEOS ABS - Addyston Plant
LDAR Leaker Replacements/Repackings -
Between 100 ppm and 250 ppm Leak
January 1, 2012 - March 31, 2012

01/09/2013

Tag #	Process Unit	Component Description	Leak Detected	Conc. (ppm)	Date Replaced	Date Repacked
00826	DIN1	Outlet valve on west pump in A13	02/28/12	202	07/18/12	

INEOS ABS - Addyston Plant
LDAR Leaker Replacements/Repackings -
Between 100 ppm and 250 ppm Leak
April 1, 2012 - June 30, 2012

01/09/2013

Tag #	Process Unit	Component Description	Leak Detected	Conc. (ppm)	Date Replaced	Date Repacked
08452	DIN2	MEK Manual block valve in catalyst dike	05/15/12	114	07/26/12	
11097	DIN2	R-1 Recycle drain valve at strainer	06/05/12	136		07/25/12

INEOS ABS - Addyston Plant
LDAR Leaker Replacements/Repackings -
Between 100 ppm and 250 ppm Leak
July 1, 2012 - September 30, 2012

01/09/2013

Tag #	Process Unit	Component Description	Leak Detected	Conc. (ppm)	Date Replaced	Date Repacked
01397	DIN1	AN totalizer outlet valve	08/29/12	116	11/17/12	
6269	DIN1	Stripper to Spent Monomer drain valve on outlet side of flow meter	08/22/12	162	11/14/12	
03862	DN1	South AN filter manual outlet valve	08/17/12	122	11/14/12	
03863	DN1	South AN filter manual outlet valve	08/17/12	102	11/14/12	
08257	DN1	West styrene inlet block valve	08/17/12	115	11/15/12	

U.S. ENVIRONMENTAL
PROTECTION AGENCY

JAN 16 2013

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